REMARKS/ARGUMENTS

A certified English translation of the Japanese Priority application accompanies this paper.

The claims remain as Claims 2-12.

The present amendment replaces that filed July 26, 2004.

The amendment to Claims 4 and 8 find basis in Table 1, page 11, of the specification, and the specification pages 12 to 15, particularly page 14, lines 7 to 12.

The specification has been amended to correct it as follows:

The amendment at page 3, line 7, has the net effect of changing "cloudiness tends to decrease" to "cloudiness tends to increase" referring to a high compounding ratio of polycarbonate resin. A similar change is made at page 13, line 26. Basis appears in the general tenor of the paragraph bridging pages 2 and 3 and in the data in Table 1, page 16, is explained in the next paragraph.

The following table illustrates the data in Table 1 (on page 16 of the specification) rearranged according to the orders of PC resins (0 → 3→ 5 → 10 → 30 → 40 → 50). As evident from the following Table, as the amount of PC resin becomes larger, cloudiness (%) increases from 1% to 22%. [The corrected composition of comparative Example 2, see below, is itemized].

		Comp. Ex.		Examples			Comparative Examples	
		1	2	1	2	3	3	4
Base layer	PC resin	0	3	5	10	30	40	50
	PET resin	100	97	95	90	70	60	50
Both surface layers	PC resin	100	100	100	100	100	100	100
Total light transmittance (%)		90	90	89	88.9	88.1	88.5	88.8
Cloudiness (%)		1	1.2	2.2	2.6	6.1	15	22
Du Pont impact strength (J)		1.96	1.95	1.96	1.91	2.18	2.15	2.16

It is evident from the above rearranged data that the description "if it is high, transparency and cloudiness tend to decrease" is erroneous and should be corrected as the amendment does, and that the above amendment does not raise a new matter.

In considering the above amendment, the Official Action found new matter in the amendment as submitted in the unentered response filed July 26, 2004. As justification for the conclusion, the Official Action noted that cloudiness increased for the Example 3/Comparative Example 3 pair, but decreased for the Example 1/Comparative 1 and Example 2/Comparative 2 pairs.

The above evidently assumes that the disclosure states that transparency and cloudiness are at their optimum within the claimed range. To the contrary, the implication is that transparency tends to decrease and cloudiness increases (erroneously stated as "decreased") as the PC resin ratio increases. This becomes undesirable in balance when the PC compounding ratio is beyond 30%, as noted in the paragraph at page 13, line 20 (where again "decreased" in line 25, should have read "increased").

As disclosed at page 3, lines 14 to 18:

> From the viewpoint of the transparency and the cloudiness, the transparency is preferably at least 85% and the cloudiness is preferably at most 15% in order to visually observe the state of a packaged product from the outside.

The lower PC content recitation is determined, among other considerations, by the heat resistance behavior, please see page 170, the paragraph at line 6.

Applicants therefore submit that the questioned amendments do not incorporate new matter and are needed to clarify the record.

The amendment in Comparative Example 2, in Table 1, page 16 changing the base layer content of the PC resin from 5 to 3 corrects a typographical error. There is attached an English translation of the relevant page of Priority Japanese Application JP 11-337702 in support of the correction.

Also, as the Advisory Action mailed August 9, 2004 appropriately observes, the change in the PC resin percentage from "5" to -3- would mandate changing the PET resin percentage from "95" to -97-. The present amendment to the Comparative Example 2 tabulation does just that. This corrects an obvious editorial error.

The above is confirmed by the description in the Kadoya reference (JP A-11-77938), referred to at page 2 in the first paragraph, at line 12 of the present specification and applied as prior art in the final rejection; please see the second Comparative Example tabulated in Table 2, page 11 of the translation of record of that document. The headings "(2)" identify the Comparative Examples.

The amendments in the tabulated Comparative Examples therefore correct obvious typographical and editorial errors.

Reconsideration and withdrawal of the rejection under 35 U.S.C. §103 of Claims 7-11 as unpatentable over Miyamoto et al. (U.S. 5,208,103) in view of Kadoya (HEI 11[1999]-77938), recited in section 9 of the 13 August 2003 office action [1000301303(7)], are requested.

In Section 9 of the referred to Office Action, it is stated:

The references are analogous because they both deal with packaging laminates.

> It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the laminated sheets of Kadoya as the carrier tape in the packaging of Miyamoto in order to insure that the carrier tape will survive heat treatment, e.g., during heat sealing.

and further:

> The motivation to employ the sheets of Kadoya as the carrier tapes in the packaging of Miyamoto is found at page 2, par. 0001 of Kadoya, where the use of its sheets in packaging that is to be heated is taught.

However, the two references relied upon relate to non-analogous arts. The food art to which Kadoya primarily relates and the electronics art, to which Miyamoto et al. relate, are

not, in Applicants' views related art. It is not at all evident that one seeking to improve on Miyamoto et al. would look to the food art for guidance, particularly since the Miyamoto et al. invention relates primarily to the cover tape to be applied to a carrier tape and not to the carrier tape itself. In so far as carrier tapes are concerned, Miyamoto et al. teaches little more than they are known. Criteria for their selection or construction do not appear in Miyamoto et al.

Reconsideration and withdrawal of the rejection of Claims 2-12 under 35 U.S.C. §103(a) as being obvious over Kadoya taken with JP 05294376A's abstract for reasons of record are requested.

The rationale for the rejection is the following from the prior Official Action stating the rejection.

> The references are analogous because they both deal with thermoplastic sheets having protective coatings/layers thereon.
>
> It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the conductive sheets of JP-376 as protective layers for the sheets of Kadoya in order to make them suitable for packaging electronics.
>
> The motivation to employ the sheets of JP-376 on the sheets of Kadoya is found in the use/advantage section of the JP-376 abstract, where the conductive sheets are taught to help protect electronics packaged therein from damage by static electricity.

Applicants, in response, do not agree that the references are in analogous arts, it being presumed that is what was intended by the expression that the "references are analogous". The specific purpose of the packaging would appear to require consideration.

Kadoya (JP 11-77938) is concerned particularly with the use of a sheet for making packaging containers and caps for prepared food that are to be heated or defrosted in a

microwave oven, par. [0001], as acknowledged in the subject application, page 2. Reference is made to coating with a "static inhibitor" par. [0002] of Kadoya.

However, the particular needs of the electronic component tape packaging are not addressed and the arts do not appear to be analogous. In particular, a carrier tape (claim 8) appears to be quite unlike the individual containers disclosed by Kadoya and Kadoya does not guide one to the specific resistivity recited in Claim 4. (Claims 4 and 8 are the independent claims in the subject application).

Indeed, JP 376's conductive thermoplastic resin sheet is expanded polystyrene, polyethylene, or polypropylene resin sheet which is mixed or coated with carbon black for example.

Such a sheet would clearly not be suitable for a heat resistant transparent sheet since it would cause deterioration of the heat resistance and interfere with transparency. Food containers of expanded thermoplastics are notoriously inappropriate for food containers to be microwaved and are not transparent. A conductive coating would also appear to be inappropriate. The maximum service temperature for expanded polystyrene appears to be about 80°C, please see the submitted page 745 of Kirk-Othmer, Encyclopedia of Chemical Technology, 4th Ed., Vol. 11, 1994. The many internal non-parallel surfaces of an expanded plastic would clearly decrease its transparency. Items in the package would not be clearly seen.

Reconsideration and withdrawal of the rejection of Claims 2-12 under 35 U.S.C. §103(a) as being obvious over Kadoya taken with Kitaoka for reasons of record are requested.

The Official Action refers to the 13 August 2003 Office Action for justification of the rejection, noting sections 4 and 8.

It is there noted, with respect to Kadoya that:

> At page 7, par. 0021, it teaches antistatic coatings. The sheets are useful in containers that are to be heated (page 2, par. 0001).

The Official Action notes that Kadoya "fails to teach the use of antistatic layers having the claimed resistivities." It may be added that it fails to teach a conductive coating (as recited in independent Claim 4) and "an electronic component packaging container – which is a carrier tape," as recited in independent Claim 8.

As justification for the rejection, the Official Action indicated:

> The motivation to employ the antistatic layers of Kitaoka on the sheets of Kadoya is found at page 3, par. 0004 of Kitaoka, where its tapes are said to be sealable and antistatic.
>
> It is deemed desirable to make electronics packaging sheets/tapes that are sealable and antistatic in order to package the electronics easily and protect them from static charges.

However, as discussed above with respect to the previous rejection discussed, Applicants' view is that the two applied documents relate to non-analogous arts and are only combinable with Applicants' teachings as a guide. "Packaging" taken alone would appear to be insufficient justification. The purpose of the package would appear to require consideration.

Favorable reconsideration is solicited.

Respectfully submitted,

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MAIER & NEUSTADT, P.C.
Norman F. Oblon

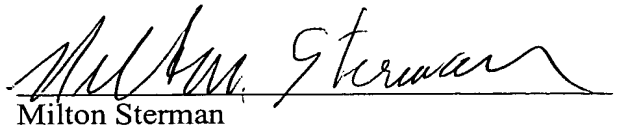

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Table 1

		Examples			Comparative Examples					
		1	2	3	1	2	3	4	5	6
Base layer	PC resin	5	10	30	0	3	40	50	0	100
	PET resin	95	90	70	100	95	60	50	100	0
Both surface layers	PC resin	100	100	100	100	100	100	100	-	-
Total light transmittance (%)		89	88.9	88.1	90	90	88.5	88.8	90	90.6
Cloudiness (%)		2.2	2.6	6.1	1	1.2	15	22	1	1
Du Pont impact strength (J)		1.96	1.91	2.18	1.96	1.95	2.15	2.16	1.84	2.4

Table 2

		Examples			Comparative Examples					
		1	2	3	1	2	3	4	5	6
Post-formability		○	○	○	○	○	△	△	○	×
Heat resistance	90°C	○	○	○	○	○	○	○	×	○
	100°C	○	○	○	○	○	○	○	×	○
	110°C	○	○	○	△	△	○	○	×	○

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FLAVOR CHARACTERIZATION
TO
FUEL CELLS

1994

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Table 2. Physical Properties of Commercial Rigid Foamed Plastics[a]

Property	ASTM test	Cellulose acetate[b]	Phenolic[c]	Polystyrene							PVC[g]		Polyurethane			
				Extruded plank[b,d]		Expanded plank[e,f]			Extruded sheet				Polyether[h]		Isocyanurate	
															Bun[g]	Laminate[i]
density, kg/m³[j]		96–128	32–64	35	53	16	32	80	96	160	32	64	32–48	64–128	32	32
mechanical properties																
compressive strength, kPa[k] at 10%	D1621	862	138–620	310	862	90–124	207–276	586–896	290	469	345	1035	138–344	482–1896	210	117–206
tensile strength, kPa[k]	D1623	1172	138–379	517		145–193	310–379	1020–1186	2070–3450	4137–6900	551	1207	138–482	620–2000	250	248–290
flexural strength, kPa[k]	D790	1014	172–448	1138		193–241	379–517				586	1620	413–689	1380–2400		
shear strength, kPa[k]	C273	965	103–207	241			241				241	793	138–207	413–896	180	117
compression modulus, MPa[l]	D1621	38–90		10.3			3.4–14				13.1	35	2.0–4.1	10.3–31		
flexural modulus, MPa[l]	D790	38		41			9.0–26				10.3	36	5.5–6.2	5.5–10.3		
shear modulus, MPa[l]	C273		2.8–4.8	10.3			7.6–11.0				6.2	21	1.2–1.4	3.4–10.3		1.7
thermal properties																
thermal conductivity, W/(m·I)	C177	0.045–0.046	0.029–0.032	0.030		0.037	0.035	0.035	0.035	0.035	0.023		0.016–0.025	0.022–0.030	0.054	0.019
coefficient of linear expansion, 10^{-5}/°C	D696		0.9	6.3	6.3	5.4–7.2	5.4–7.2	5.4–7.2					5.4–7.2	7.2	7.2	
max service temperature, °C		177	132	74		74–80	74–80	74–80	77–80	80			93–121	121–149	149	149
specific heat, kJ/(kg·K)[m]	C351			1.1									ca 0.9	ca 0.9	ca 0.9	
electrical properties																
dielectric constant	D1673	1.12	1.19–1.20	<1.05	<1.05	1.02	1.02	1.02	1.27	1.28			1.05	1.1	1.4	
dissipation factor		20	0.028–0.031	<0.0004	<0.0004	0.0007	0.0007	0.0007	0.00011	0.00014			13	18		
moisture resistance																
water absorption, vol %	C272	4.5	13–51	0.02	0.05	1–4	1–4	1–4								
moisture vapor transmission, g/(m·s·GPa)[n]	E96			35		<120	35–120	23–35	86	56	15		35–230	50–120		230

[a]Data on epoxy resins can be found in Ref. 132; on urea–formaldehyde resins, Ref. 133. [b]Ref. 22. [c]Refs. 134 and 135. [d]Refs. 22 and 136. [e]Refs. 135 and 137. [f]Ref. 138. [g]Ref. 139. [h]Ref. 140. [i]Ref. 141. [j]To convert kg/m³ to lb/ft³, multiply by 0.0624. [k]To convert kPa to psi, divide by 6.895. [l]To convert MPa to psi, multiply by 145. [m]To convert kJ/(kg·K) to Btu/(lb·F), divide by 4.184. [n]To convert GPa to psi, multiply by 145,000.